**Geometry and Measures**

|  |  |  |  |
| --- | --- | --- | --- |
| I can do this | Grade | Title | Hegarty Maths Link |
|  | 5 | Arc lengths and sectors | 544-547 |
|  | 5 | Derive triangle results | 494 |
|  | 5 | Enlargements and negative SF | 646-647 |
|  | 5 | Loci |  |
|  | 5 | Pythagoras | 498-507 |
|  | 5 | Similarity and Congruence | 608-621 |
|  | 5 | Standard constructions | 659-699 |
|  | 5 | Surface Area | 584-586 |
|  | 5 | Trigonometric ratios | 508-515 |
|  | 5 | Volume | 568-574 |
|  | 4 | Alternate and corresponding angles | 481-482 488-491 |
|  | 4 | Area of a circle | 539-543 |
|  | 4 | Areas of composite shapes | 555 |
|  | 4 | Areas of triangles, trapezia and parallelograms | 556-559 |
|  | 4 | Bearings | 492-496 |
|  | 4 | Circle terminology | 592 |
|  | 4 | Circumference of a circle | 534-538 |
|  | 4 | Congruent triangles | 611-613 |
|  | 4 | Enlargements and fractional SF | 642-645 |
|  | 4 | Perimeter of 2D shapes | 548-552 |
|  | 4 | Plans and elevations |  |
|  | 4 | Polygons | 561-564 |
|  | 4 | Solve geometrical problems | 565 |
|  | 4 | Vector arithmetic | 622-623 |
|  | 4 | Volume of prisms | 568-574 |
|  | 3 | 3-D Shapes |  |
|  | 3 | Measuring lines and angles | 458-460 |
|  | 3 | Properties of quadrilaterals |  |
|  | 3 | Properties of triangles |  |
|  | 3 | Translations and vectors | 637-638 |
|  | 3 | Using standard units |  |

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| I can do this  **Algebra** | Grade | Title | Hegarty Maths Link |
|  | 5 | Algebraic terminology | 154 |
|  | 5 | Cubic and Reciprocal graphs | 298-301 |
|  | 5 | Deduce quadratic roots algebraically | 230-231 |
|  | 5 | Derive an equation | 176 |
|  | 5 | Equation of a line | 206-215 |
|  | 5 | Expand the product of two binomials | 162-165 |
|  | 5 | Factorising quadratic expressions | 223-226 |
|  | 5 | Fibonacci, quadratic and simple geometric sequences | 263,264 |
|  | 5 | Graphical solution to equations | 260 |
|  | 5 | Inequalities on number lines | 265-266 |
|  | 5 | Linear equations | 184-186 |
|  | 5 | Quadratic graphs | 251 |
|  | 5 | Reciprocal real-life graphs | 300-301 |
|  | 5 | Simplify indices | 173-175 |
|  | 5 | Simplify surds | 115 |
|  | 5 | Solve linear inequalities in one variable | 267,269,270 |
|  | 5 | Writing formulae and expressions | 151-152 |
|  | 4 | Changing the subject | 280-283 |
|  | 4 | Collecting like terms | 156-157 |
|  | 4 | Expressions | 158-159 |
|  | 4 | Factorise single bracket | 168-169 |
|  | 4 | Finding the equation of a line | 206-215 |
|  | 4 | Graphs of linear functions | 205 |
|  | 4 | Linear equations one unknown | 177-183 |
|  | 4 | Multiplying single brackets | 160 |
|  | 4 | nth term of a linear sequence | 198 |
|  | 4 | Number machines |  |
|  | 4 | Substitution | 189,155,278 |
|  | 3 | Coordinates in four quadrants | 199 |
|  | 3 | Plotting straight line graphs | 205 |
|  | 3 | Position to term rules | 197 |

**Statistics**

|  |  |  |  |
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| I can do this | Grade | Title | Hegarty Maths Clip Number |
|  | 5 | Histograms with equal class widths | 425 |
|  | 5 | Scatter graphs & Correlation | 453-454 |
|  | 4 | Comparing data using graphs |  |
|  | 4 | Comparing Distributions |  |
|  | 4 | Averages from a frequency table | 414-418 |
|  | 4 | Sampling | 395-398 |
|  | 4 | Time series | 450-452 |
|  | 3 | Two-way Tables | 422-424 |
|  | 3 | Pie Charts | 427-429 |
|  | 3 | Types of data | 392-393 |

**Ratio, Proportion and rates of change**

|  |  |  |  |
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| I can do this | Grade | Title | Hegarty Maths Clip Number |
|  | 5 | Compound Units |  |
|  | 5 | Gradient & the rate of change |  |
|  | 5 | Growth and decay | 94-95 |
|  | 5 | Interpret Proportion | 348 |
|  | 5 | Reverse percentages | 96 |
|  | 5 | Problems with compound units |  |
|  | 5 | Scale factors and similarity | 608-621 |
|  | 5 | Simple Interest and Financial Maths | 93 |
|  | 4 | Compare Fractions, Decimals and Percentages | 82,83 |
|  | 4 | Compare lengths, area, volume |  |
|  | 4 | Comparing quantities as a ratio | 328 |
|  | 4 | Division of a quantity as a ratio | 332-334 |
|  | 4 | Express one quantity as a % of another |  |
|  | 4 | Percentage change | 97 |
|  | 4 | Problems involving ratio | 335-337 |
|  | 4 | Proportion and ratio | 330 |
|  | 4 | Ratio and fractions | 329-331 |
|  | 4 | Ratio Sharing | 332-334 |
|  | 3 | Convert standard units |  |
|  | 3 | Express one quantity as a fraction of another |  |
|  | 3 | Use ratio notation | 329 |
|  | 3 | Use scale factors, diagrams and maps |  |

**Number**

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| --- | --- | --- | --- |
| I can do this | Grade | Title | Hegarty Maths Clip Number |
|  | 5 | Calculating with fractions | 63-71 |
|  | 5 | Error intervals |  |
|  | 5 | Index Laws | 102-110 |
|  | 5 | Limits of accuracy | 137-139 |
|  | 4 | Adding and subtracting fractions | 66 |
|  | 4 | Checking calculations | 128-129 |
|  | 4 | Compound measures |  |
|  | 4 | Converting metric units |  |
|  | 4 | Estimation | 131 |
|  | 4 | Fractions and percentages | 75,76 |
|  | 4 | Fractions and ratio problems | 330 |
|  | 4 | Interpret calculator displays | 129-128 |
|  | 4 | LCM and HCF | 32, 35, 36 |
|  | 4 | Multiples and factors | 27, 33 |
|  | 4 | Multiplying fractions | 68, 69, 72 |
|  | 4 | Operations | 24 |
|  | 4 | Order of operations | 44 |
|  | 4 | Rounding | 130, 133 |
|  | 4 | Standard Form | 121-128 |
|  | 4 | Terminating decimals and fractions | 53, 54 |
|  | 3 | Decimals | 45-51 |
|  | 3 | Listing outcomes |  |
|  | 3 | Prime numbers | 28 |
|  | 3 | Using standard units |  |
|  | 2 | Add and Subtract integers | 19,20,38-41 |
|  | 2 | Dividing integers | 22, 43 |
|  | 2 | Multiplying integers | 21, 23, 42 |
|  | 2 | Ordering numbers | 13,14 |
|  | 2 | Place value | 13,14 |

**Probability**

|  |  |  |  |
| --- | --- | --- | --- |
| I can do this | Grade | Title | Hegarty Maths Clip Number |
|  | 5 | Probability of dependent events | 364-368 |
|  | 5 | Probability of independent events | 366-363 |
|  | 4 | Mutually exclusive sum | 353-354 |
|  | 4 | Relative Frequency | 357-356 |
|  | 4 | Tables and Grids | 351-352 |
|  | 4 | Theoretical Probability | 355 |
|  | 4 | Unbiased Samples |  |
|  | 4 | Venn Diagrams | 372-388 |
|  | 3 | Frequency Trees | 368-369 |
|  | 3 | Basic Probability | 349-350 |

**Exam details:**

**Edexcel GCSE Mathematics A - Foundation**

**Exam Dates:**

**Paper 1 (non-calc) –)**

**Paper 2 (calc) –**

**Paper 3 (calc) –**

**All papers 90 mins each**